SDMS US EPA REGION V -1

SOME IMAGES WITHIN THIS DOCUMENT MAY BE ILLEGIBLE DUE TO BAD SOURCE DOCUMENTS.

TECHNICAL REPORT FOR

147702

BLACK RIVER SAMPLING
ADJACENT TO
CHEMICAL RECOVERY SYSTEMS, INC.
SITE

R05-8512-06 APRIL 24, 1986 OHD057001810

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TABLE	OF	CON	/	VIII
I/NULL			A I LI	713

MEMORANDUM		1
MILMORANDOM	*	

MAPS 2

PHOTOGRAPHS 3

ANALYTICAL DATA 4

Cardinal



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415 International Specialists in the Environment

MEMORANDUM

DATE:

April 22, 1986

T0:

Erin Moran, RPM, USEPA, Region V

FROM:

Pat Petrella, Ecology and Environment, Inc., FIT

SUBJECT:

Ohio/R05-8512-06

Elyria/Chemical Recovery Systems

OHD057001810

INTRODUCTION

The purpose of this sampling activity was to determine if the Chemical Recovery System, Inc. (CRS) site is presently contributing to contamination of the Black River and to verify the sampling data obtained by the CRS contractor, CLOW, Inc.

A Technical Directive Document (TDD) for requesting FIT services was issued December 17, 1985 for the following scope of work:

- o Collect water samples from the Black River upstream and downstream of the CRS site as specified by the RPM.
- o Collect a water sample from a designated site outfall to the River, if possible, as specified by the RPM.
- o Submit water samples to CLP for analysis.
- Submit a technical memorandum of field activities.

SITE BACKGROUND AND DESCRIPTION

The CRS site is approximately 4 acres and is located at 124 Locust Street, Elyria, Ohio in Lorain County. The downtown area of Elyria is approximately 2.5 blocks from the site. To the North and

East, the site is bordered by Harshaw Chemical Company. It is fenced on the North, South and East sides while bordered by the east branch of the Black River and a 25' high, densely vegatated steep slope on the west. Presently, 1 building and foundations for 2 others structures are onsite. Refer to Section 2 for a location map and site sketch.

The site property is presently owned by Mr. and Mrs. Russell Obitts. Mr. Obitts operated a Chemical Recovery Facility onsite before leasing the property to CRS in 1974. CRS accepted drummed and bulk chemical wastes for reclamination using a distillation process. As a result of citizen complaints and site investigations by the local Health Department and Fire Inspector, severe contamination onsite and in the River was identified. Fire code violations were also found. The Fire Marshall declared the site to be a fire hazard and ordered the violations corrected. Follow-up inspections by the U.S. EPA revealed approximately 4000 55-gallon drums and 53,500 gallon of bulk chemical stored improperly onsite. Sample analyses of spilled materials indicated the presence of various hazardous substances including PCB, trichloroethene, metlyl elthyl Ketone (MEK), toluene and xylene.

Because the site posed a substantial threat to the local population and the environment, U.S. EPA initiated legal action. On October 7, 1980 a civil action was brought on behalf of the U.S. EPA in the U.S. District Court, Northern District of Ohio, against CRS to abate an imminent and substantial endangerment to public health and the environment.

The law suit also sought restitution of money spent for investigation of the site. Chemical Recovery responded by removing the drums, tanks, and process equipment from the site and transporting hazardous waste to U.S. EPA approved disposal sites. In 1981, U.S.

EPA approved disposal sites. In 1981, U.S. EPA requested FIT (Ecology and Environment, Inc.) to perform a hydrogeologic study at the site. Sample analyses revealed a release of contaminants to groundwater and extensive soil and subsurface contamination. As the result of this study and information obtained from other site visits by the U.S. EPA a consent order was issued July 12, 1983. Refer to Section 5 for a copy of this document.

In addition to the remedial work, the consent order required CRS to sample the Black River periodically to monitor the site's impact on the river. The Company contracted CLOW, Inc. to do this surveillance work. To verify the quality of the sampling performed in November, 1985 by CLOW, Inc. and assess river water quality, U.S. EPA requested FIT to sample the River.

FIELD ACTIVITIES

PRE-SAMPLING ACTIVITIES

Upon arrival on February 5, 1986, the entrance to the site was locked. After determining that the appropriate access route to the river for sampling was from onsite, FIT contacted Mrs. Obitts to gain access. After clearing the site, FIT proceeded to locate the sampling points along the river. These locations are shown on Figure 2 in Section 2. Mrs. Obitts left the site requesting FIT lock the gate when sampling was complete

SAMPLING ACTIVITIES

The samples S1, S2, and S3 were collected from three distinct sampling points along the river upstream and downstream of CRS and at an outfall discharge from CRS (See Figure 2). All sample locations were on the east side of the east branch of the Black River. Sample

S1 is the downstream sample, S2 is the outfall sample, and S3, the upstream sample. Sample S1 was collected approximately 12 feet upstream of the site's southern fence line because there was no place to stand along the river's edge, further downstream, to collect the sample. Sample S2, the outfall sample, was collected downstream of a point suspected of being the outfall location sampled by CLOW, Inc. in November, 1985. This alternate location was chosen since the outfall pipe could not be found. This location was chosen based on the following information:

- o Approximately 20' upstream of the sampling point was a cove recessed into the river bank that indicated where an outfall may have been active at one time. There was no flow from this location into the river.
- o Broken drain tile was noted in the cove area. A report by Ecology and Environment, Inc. (E&E) dated April 26, 1982 indicates that the outfall in question was the drain tile.
- o The actual distance from the north site boundary to the center of the cove was approximately that distance measured by E&E during the hydrogeologic study.

A duplicate sample was collected at location S2. A blank of distilled water was also prepared. None of the samples were filtered. The river appeared to exhibit higher flow than usual because of melting snow and rain.

Upon leaving the site at approximately 5:30 p.m., FIT locked the gate. The following day, FIT met with Mr. & Mrs. Obitts and provided a receipt for samples.

SAMPLE SHIPMENT

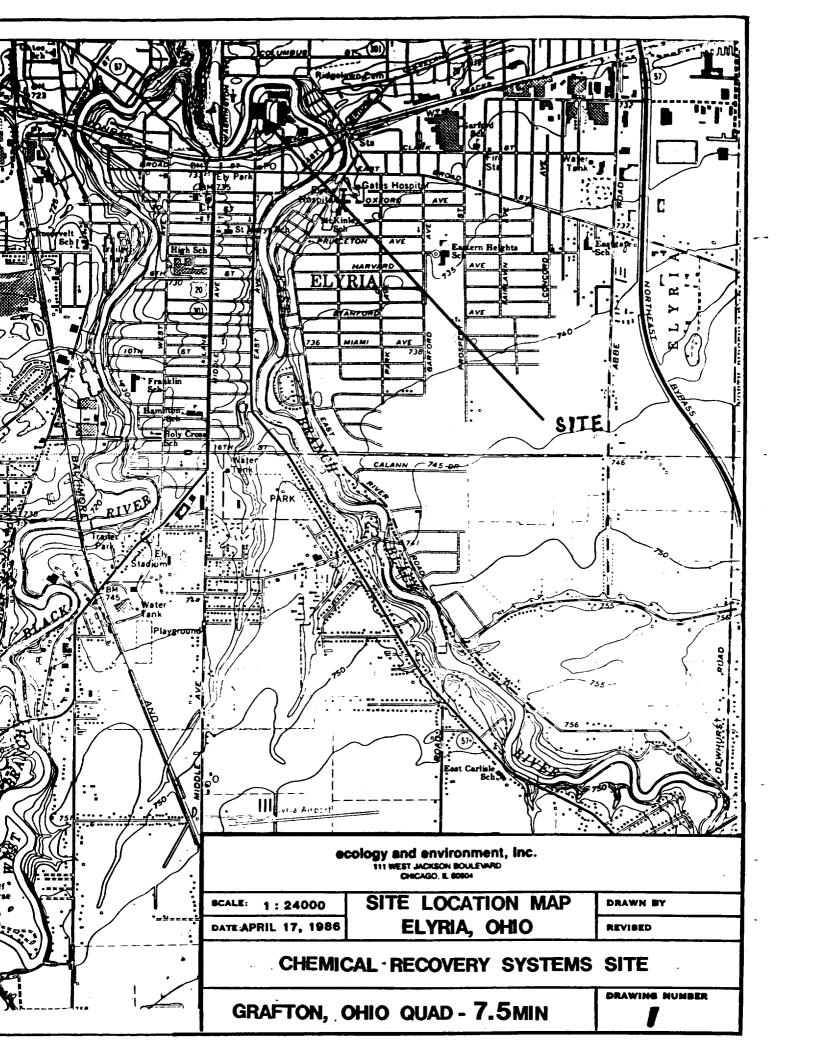
Samples were packaged and shipped on February 5, 1986 according to established U.S. EPA protocol to the following laboratories:

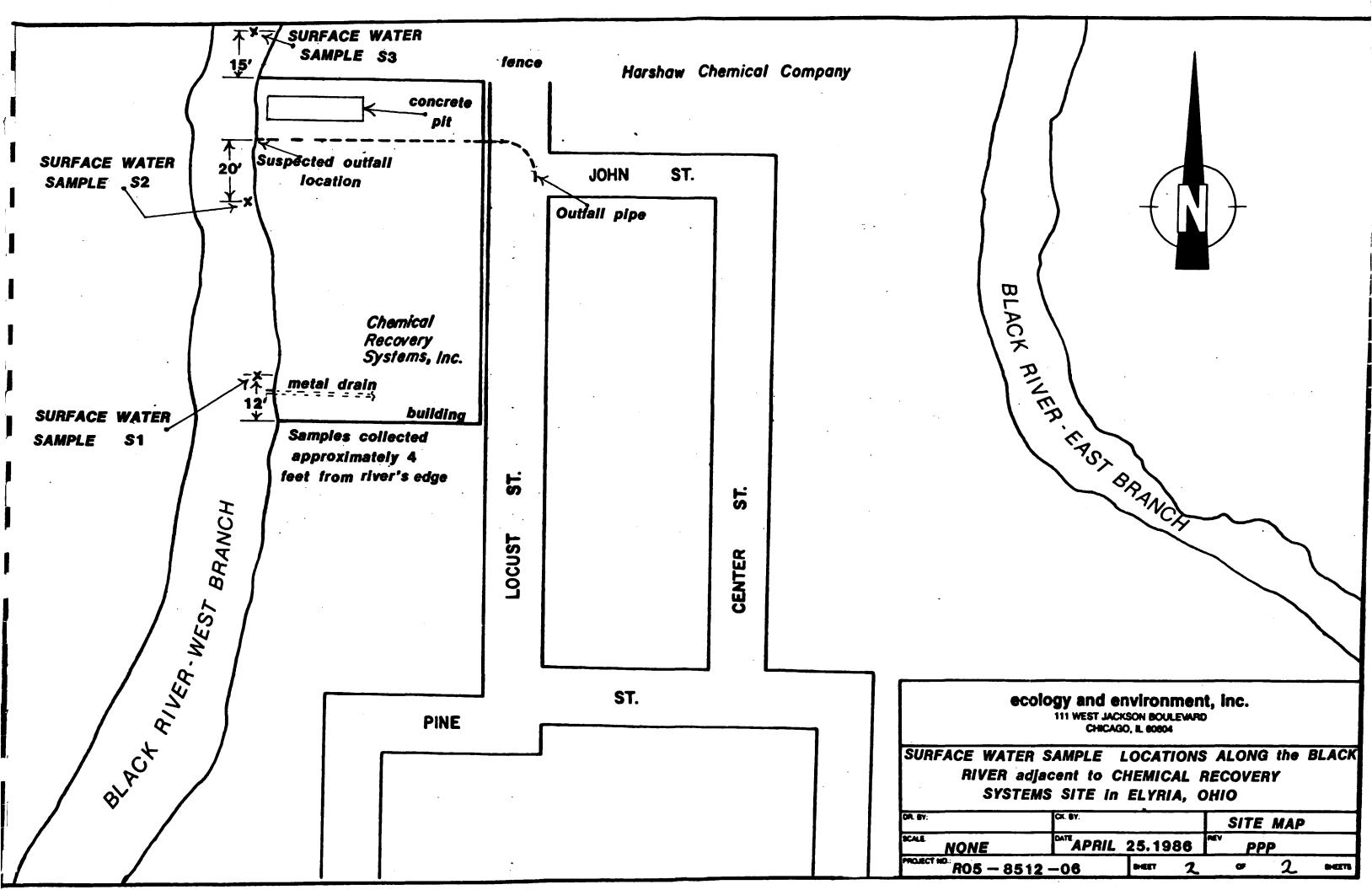
Chemtech Consulting Group, LTD. (Inorganics) 360 West 11th Street
New York, New York 10014
(212) 255-2100

Hazelton Laboratories (organics) 3301 Kinsman Boulevard Madison, Wisconsin 53704 (608) 241-4471

92Z:6F









SDMS US EPA REGION V COLOR-RESOLUTION - 2

IMAGERY INSERT FORM

The following page(s) of this document include color or resolution variations. Unless otherwise noted, these pages are available in monochrome. The original document is available for viewing at the Superfund Records Center.

SITE NAME	Chemical Recovery
DOC ID#	147702
DESCRIPTION OF ITEM(S)	Photos
PRP	RMD - Chemical Recovery
DOCUMENT VARIATION	X COLOR OR RESOLUTION
DATE OF ITEM(S)	February 5, 1986
NO. OF ITEMS	10
PHASE	Remediation
OPERABLE UNITS	
LOCATION	Box # Folder # Subsection
PHASE (AR DOCUMENTS ONLY)	RemedialRemovalDeletion DocketOriginalUpdate #Volume of
	COMMENT(S)
Field Pho	otography Log Sheets Pages 1-6

MTE 2-5-86

TIME 4: 20 A.H. (H)

DIRECTION: N NNE NE ENE

E ESE SE SSE

BSSW SW WSW

שמת שת אוש ש

JEATHER Caol, Wet.

Derzele Overant.

SITE Chem. Recovery Systom

TDD# <u>R95-8512-06</u>

PHOTOGRAPHED BY:

Pave VAughn

_SAMPLE ID# (if applicable)

SWZ ONTAIL.



DESCRIPTION: FAR AWAY Shot of SAmple location on the River.

DATE 2-5-96

TIME <u>4:10</u> A.H. (P.H.

DIRECTION: N NNE NE ENE

E ESE SE SSE

S SSW SW WSW

שאו או אוע ש

WEATHER (00/, Wet,

DRIZZLE, OVERCAST

SITE Chem. Renvery Syst.

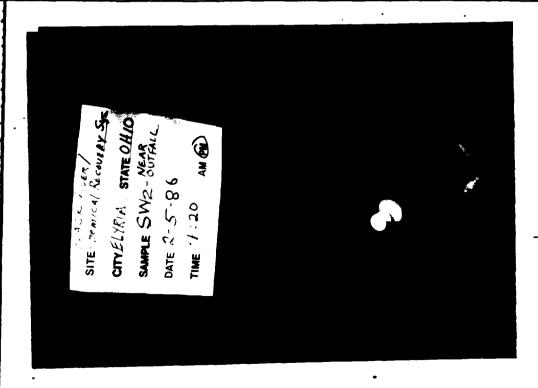
TDD# 1805- 8512-06

PHOTOGRAPHED BY:

DAVE VAUGHT

AMPLE ID (if applicable

SW Z NEAR FALL



DESCRIPTION: Close up shot of sample Location AND ID coud

MTE 2-5-86

TIME _3:30 A.H. P.M.

DIRECTION: N NNE NE ENE

E ESE SE SSE

(E) SSW SW WSW

WIN WE WIN

WEATHER COO / wet,

PRIZZLE, OVERCAST.

SITE Chem. Recovery Syst.

TDD1 205-8512-06

PHOTOGRAPHED BY:

Pare VAugha .

SAMPLE ID# (if applicable)

5 W-1 (DOWNSTRAM)



DESCRIPTION: Looking downstream on Bruch Riner, East Granch at sample 1014 tean & surrounding area.

DATE 2-5'-86

TIME 3:30 A.H. P.M.

DIRECTION: N NNE NE ENE

E ESE SE SSE

SSSW SW WSW

שממ אש אאש

WEATHER Cos, Wet,

DRIZZIE, OVERCAST

SITE Chem. Recov. Syst.

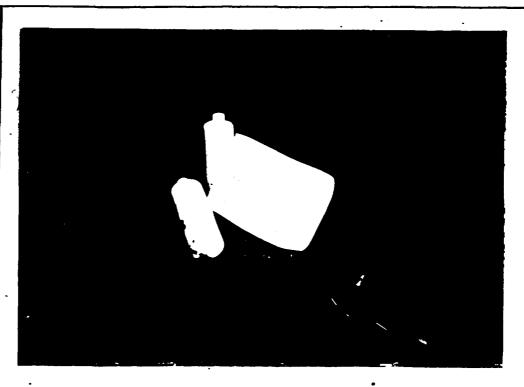
TDD# R05-8517-06

PHOTOGRAPHED BY:

Pare Vaugha

SAMPLE ID# (if applicable)

SN-1 (Downstream.)



DESCRIPTION: cullusion, a clase up. NIEW.

DATE 2-5-86

TIME . 4:45 A.H. P.H.

DIRECTION: N NNE NE ENE

ESE SE SSE

s ssw sw wsw

A AMA MM MMM

WEATHER Cool, Wet.

DRITTLE, OVERCAST

SITE Chem. Reconey Syst.

TDD# 205-8512-06

PHOTOGRAPHED BY:

Dave Vaughn:

SAMPLE ID# (if applicable)

5W-3 (yostream)



DESCRIPTION: Sample - lose shat next to river where sample was collected. Compensation for poor lighting museo wash out of FO corp.

DATE 2-5-86

TIME 4:45 A.H. P.M.

DIRECTION: N NNE NE ENE

E ESE SE SSE

S SSW SW WSW

M NUM NM NUM

WEATHER Cool, Net,

Drizzle, Overcast

SITE Chem. Rowney Syst.

TDD# 805-8512-06

PHOTOGRAPHED BY:

Dave Vangha

SAMPLE ID# (if applicable)

SW-3 (ystreAm)



DESCRIPTION: FAR shot of sample lacation looking downstram

ATE 2-5-86

TIME 4: 30 A.M. P.H.

-IRECTION: N NNE NE ENE

E ESE SE SSE

S SSW SW WSW

שמא שאש ש

TEATHER Cool Wat,

DRIZZIE, OVERCAST.

itte Chem. Recovery Synt.

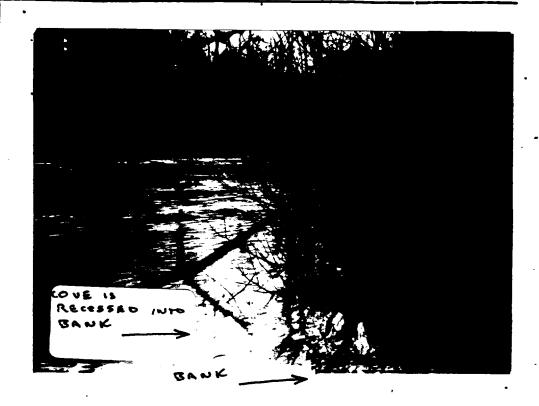
TODA \$05-8517-06

PHOTOGRAPHED BY:

DAVE VAUghor.

SAMPLE ID# (if applicable)

NA



DESCRIPTION: bobing up stream from come area where and bull

NAS suspected of texisting. Come area not shown but is

to the Right of Ficture.

DATE 2-5-86

TIME 4: 35 A.H. P.H.

DIRECTION: N NNE NE ENE

E ESE SE SSE

s sswswwsw

U UNU NU NNU

WEATHER Coul, Wet

DRITTLE, OVERCAST

SITE Chem. Recovery Sept.

TDDI 805-8512-06

PHOTOGRAPHED BY:

Pave Vaugha

SAMPLE ID# (if applicable)

NA



edge, Steep sloped walls along Rines shown in background

MTE 2-5 -86

TIME 4: 25 A.M. P.W.

DIRECTION: N NNE NE ENE

E ESE SE SSE

(8) SSW SW WSW

שאא אא אאש ש

-WEATHER Cool, Wet,

DRIZZIE, OVERCAST

SITE Chem. Reconcy Syst.

TDD# <u>R05-8517-06</u>

PHOTOGRAPHED BY:

Dave VANgha-

SAMPLE ID# (if applicable)

WA



DESCRIPTION: Look ing downstream along bank of River. Note The treavy vega tation and limited walking room to collect Somple's.

DATE 2-5 -86

TIME 4: 25 A.H. P.H.

DIRECTION: N NNE NE ENE

E ESE SE SSE

S SSW SW WSW

שומו אש אוש ש

WEATHER Cool, Wet,

Prizzle Overcast.

SITE Chem. Recovery Sypt

TDD1 R05-8512-06

PHOTOGRAPHED BY:

DAVE VAUGHN.

SAMPLE ID# (if applicable)

NA



DESCRIPTION: Looking upstream from cone area invoice true Riner. height and slopes along. N. end of site on West side of Riner.

Cardinal*



ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINDIS 60804, TEL. 312-663-9416 International Specialists in the Environment

Date Received for Review: $\frac{4 29 86}{}$ Date Review Completed: $\frac{5 5 86}{}$
70: Pat Petrella
FROM: Suzanne Kozlowski
SUBJECT: Chemical Recovery Systems
Sample Description: Case # 5558 five (5) low water organics
Project Data Status: COMPLETE
FIT Data Review Findings: See Ton Clyres review

Additional Comments:

Bo ok	No.	_5
Page	No.	108

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V

DATE	== 4/18/86		
SUB.	TECT: Review of	Region V CLP Data for Review on4 MAR 86	
FROM	1: Curtis Ross, Central Regi	Director (5SCRL) Willem William III	
TO;	Data User:	FIT	
We I	nve reviewed th	e data for the following case(s).	
		AL RECOVER_SYSTEMSSMO Case No5558 No. of D.U./Activity 3031Samples5NumbersY905/C48500	
CRL	Nc86FD04S7	B TO 86FDD4580	
SMO	TRAFFIC No	EE993,EE994,EG536 TO EG538 Hrs. Required	
CLP	Laboratory	HAZELTONfor review:4	
Fol:	lowing are out	findings:	
A	SURROGATES	VOA AND SV ARE ACCEPTABLE. PESTICIDES HAS A LOW DEC FOR EE994. THE REMAINING SURROGATES ARE ACCEPTABLE.	
B	MS/MSD	ENDRIN HAS A 34 AND 42% %R LEVEL. THE REMAINING R%D AND %R ARE ACCEPTABLE.	
C	LAB BLANKS	MB-1, 30164 HAD TOLUENE (CRDL. MB-1, 30172 HAD ACETONE (14) AND TOLUENE (1). THE REMAINING BLANKS ARE ACCEPTABLE.	
D	TUNING	ACCEPTABLE	
E	DETECTION	THIS LAB HAS SV DETECTION LIMITS 2X THE NORMAL CRDL. F. THOMAS IS INVESTIGATING THIS PROBLEM.	
	Data are accep		
		table for use with qualifications. minary - pending verification by contractor lab.	
	Data are unacc		
cc: Dr. Alfred Haeber/ Joan Fisk/Gary Ward. EPA Support Services. Ross K. Robeson, EMSL-LasVegas			
Dor Trees, CLP/Sample Mariagement Office			

((((USER"8 INFORMATION))))
CASE: 5558 SITE: CHEMICAL RECORERY SYSTEMS
DATE: 25 MARCH 86 REVIEWER: TOM CLYNE

TOLUENE FOUND IN THE BLANK. DO NOT USE TOLUENE.
TOTAL XYLENE FOUND, BUT BELOW CRDL. THERE IS A TIC
LAB ARTIFACT.
NO HRS HITS

TOLUENE IN THE BLANK, DO NOT USE.

XYLENE IS A --J--. TIC IS AN ARTIFACT.

NO HRS HITS.

EG 536 TOLUENE FOUND IN THE BLANK, DO NOT USE. TIC ARE ARTIFACTS.
NO HRS HITS.

EG 537 TOLUENE FOUND IN BLANK, DO NOT USE. THE TIC IS A LAB ARTIFACT FOR SV AND UNKNOWN IN THE VOA.
NO HRS HITS

EG 538 TOLUENE FOUND IN THE BLANK, DO NOT USE.

TOTAL XYLENES FOUND, BUT --J--. THE TIC IS A LAB
ARTIFACT.

NO HRS HITS.

SUMMARY: THERE ARE NO HRS HITS IN THIS DATA PACKAGE.

RECEIVED Ark 2 9 1986

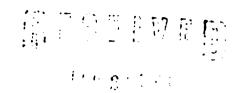
- 1-



HAZLETON LABORATORIES AMERICA, INC.

3301 KINSMAN BLVD. • P.O. BOX 7545 • MADISON, WI 53707 • (608) 241-4471 • TLX 703956 HAZRAL MDS UD

February 21, 1986



Sample Management Office Viar and Company 300 Noth Lee Street Alexandria VA 22314



Enclosed please find the data packages for Case No. 5558. These samples were received on February 6, 1986 from U. S. EPA Region V. All samples were analyzed and reported according to the protocols provided under our Contract No. 68-01-7146.

Please note the following summary comments relating to the contractual quality control items in this case:

- O <u>GC-MS Tuning</u>. All tuning requirements for both BFB and DFTPP for samples analyzed in this case were within contract criteria.
- o <u>Instrumental Calibrations</u>. All instrumental calibrations for all fractions analyzed (VOA, BNA, and pesticides) were within contract criteria for both initial and continuing calibrations.

Please note that on the Pesticide Evaluation Standards Summary (Form VIII), DBC is not added to our individual Mix B, toxaphene, or PCB 1260 standards when co-elution problems interfere with either a specific target compound or a major identifying peak on the column used. We also use an extra standard we call "column check" which contains only DDT and endrin and is used exclusively for the calculation of breakdown.

- Surrogate Recoveries. The surrogate recoveries calculated and reported for the volatile, semi-volatile and pesticide fractions were found within contract limits with one exception. The DBC surrogate was outside of the advisory limits (low end), for sample EE994 of the pesticide fraction.
- O <u>Method Blanks</u>. All method blanks analyzed with this Case were found to be within acceptable contract criteria for all fractions.

Sample Management Office February 21, 1986 Page 2

If you have any questions regarding this case or need any further clarifications, please feel free to call.

Sincerely,

David C. Hills

David C. Yell

Manager, Environmental Analysis

DCH/msw

cc: USEPA Region V

USEPA EMŠL-LV Central File

In Reference to Case No(a):

Contract Laboratory Program REGIONAL/LABORATORY COMMUNICATION SYSTEM

Telephone Record Log

Date of Call:	25 M	786		~ \
Laboratory Name:	Hars les	to Lit	1608	3) 141-44
Lab Contact:	DAVE	HILLS		
Region:	I	 - 		
Regional Contact:		· · · · · · · · · · · · · · · · · · ·		
Call Initiated By:	Laboratory	Region		
in reference to data for		umber(s):	urk	
(surridge to	I.D.L. at 1	7	ser /1) -	
· wr		· · ·	ser /11	
Summary of Questions/Is	ssues Discussed:			
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(2) Harry pro	The Further	275 0/	mo pro	116
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Bi 01/12	acetan his	earl hart "	way-lung	Jelite.
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Summary of Resolution:			·	
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	- Allen		25 Mais	816
Signa	ature		Date	· · · · · · · · · · · · · · · · · · ·

Distribution: (1) Lab Copy, (2) Region Copy, (3) SMO Copy

86 F P 0 4 5 78

Sample Number

E E 993:

Organics Analysis Data Sheet (Page 1)

Laboratory Name: HAZLETON LABORATORIES Lab Sample ID No: 6020135 WATER Data Release Authorized By: Daid C. VIIL	Case No:
Volatile Co Concentration: Low Dete Extracted/Prepared: Dets Analyzed: Conc/Dil Factor: Percent Moisture: {Not De	Medium (Circle One) 2-8-86 FRN 30165 2-7-86 1317

CAS Number		US Ser up /Ki
74-87-3	Chloromethene	10 U
74-83-9	Bromomethene	10 U
78-01-4	Vinyl Chloride	10 U
78-00-3	Chloroethene	10 U
76-00-2	Methylene Chloride	5 U
67-64-1	Acetone	10 U
75-15-0	Carbon Disulfide	5 U
78-38-4	1, 1-Dichloroethene	· 5 U
76-34-3	1, 1-Dichlorosthene	5 U
150-00-5	Trans-1, 2-Dichloroschene	5 11
67-66-3	Chloroform	5 U
107-06-2	1, 2-Dichlorosthene	5 U
78-93-3	2-Butanone	10 U
71-66-6	1, 1, 1-Trichlorosthene	5 U
54-23-5	Carbon Tetrachlorida	5 U
108-05-4	Vinyl Acetate	10 U
78-27-4	Bromodichloromethene	5 U

CAS		19/10 19/Kg
Number		(Circle One)
78-87-8 .	1. 2-Dichloropropene	5 U
10061-02-6	Trans-1, 3-Dichlarapropone	5 U I
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochioromethene	5 U
79-00-5	1, 1, 2-Trichloroethene	5 U
71-43-2	Benzene	5.0
10061-01-5	cis-1, 3-Dichleropropene	5.11
110-75-8	2-Chloroethylvinylether	10.11
78-25-2	Bramelarm	5 0
108-10-1	4-Methyl-2-Pentenone	10 U
591-78-6	2-Hexanone	10 U
127-18-4	Tetrachloroethene	5 U
79-34-6	1, 1, 2, 2-Tetrechloreethene	5 U
108-86-3	Taluana	4.58 54
108-90-7	Chlorobensene	5.0
100-41-4	Ethylbenzene	. 5 U
100-42-5	Styrene	5 U
	Total Xylenes	3 5 5

VO_{TC}

Date Reporting Contillars

For requiring results to EPA, the believing results qualifiers are used.
Additional Riggs or featuress capturing results are employedged. However, the
definition of each flag must be explore.

- Value of the result is a value greater than or equal to the describe hind, report the value
- W Indicases compound was analyzed for but not detected. Repair the structural detection time for the sample with the U to g., 16U/I based on necessary concentration / Shuhan astem. (This is not necessarily the injuryment detection time.). The features should retif! U-Compound was analyzed for but not detected. The number is the desirance attained attached time for the sample.
- J Indicates an assumated value. This flag is used either when oppositing a concentration for temperature, identified compounds where a 1-1 response is assumed or when the mass spectral date indicated the presence of a compound that mass the identification errors but the result is less than the specified detection while but greater than zero (e.g., 10.). If hims of detection is 10 µg ·1 and 8 depositions of 3 µg ·1 is calculated, report as 3.)
- © This flag applies to exercise parameters where the identification has been confirmed by GC MS. Single companion pasticides ≥10 agrid in the final exercit should be confirmed by GC MS.
- This flag is used when the analyte is found in the blank as well as a gample. It indicates possible probable blank generalization and within the data user to this appropriate action.
- Other specific Regs and featurates may be required to properly define the results. If used, they must be fully described and such description attached to the dest summary report.

aborstory Name	HAZLETON	LABORATORIES
	850	_

Semple Number EE 993

Organics Analysis Data Sheet (Page 2)

Semivolatile Compounds

Conceneration: (Low)	Medium (Circle One)	ALC Greenet Cline Direc
Date Extracted /Propered:	2-6-86	Separatory Funnel Extraction (II) Yes
	2-6-86	Continuous Liquid - Liquid Extraction DYes
Dese Analysed:		س عرام ال
Conc/Dil Factor:		402. ·
Persons Moisture (Decem	'' (اُور	

CAS		ug /1 gr ug /Kg (Circle One)
Number	Connect	20 U
108-95-2	Phenol bisi-2-ChloroethvilEiner	20 U
111-44-4		20 U
95-87-8	2-Chlorophenel	20 U
\$41-73-1	1 3-Dichlorobensene	20 U
106-46-7	1, 4-Dichlorobensene	20 U
100-51-4	Benzyl Alcohol	20 U
96-90-1	1, 2-Dichlerebensone	20 U
96-48-7	2-Methylphenel	20 U
20438-32-9	biel2-chloroisocropy()Ether	28 0
106-44-6	4-Memylehenel	20 U
821-84-7	N-Norses-Di-n-Propylamine	20 U
67-72-1	Hexachlereethene	20 U
96-96-3	Narabensene	20 U
78-58-1	lecoherene	20 U
88-75-8	2-Nitrophenel	
106-57-9	2. 4-Dimethylphenel	20 U
65-65-0	Bensoic Acid	
111-91-1	bral-2-Chlorosthony Methen	
120-83-2	2. 4-Dichlorophenel	20 U
120-82-1	1. 2. 4. Inchigrapensens	20 !!
91-20-3	Negrithelens	20 N
108-47-8	4-Chiereensime	20 U
87-48-3	Hexachierebutachene	20 U
\$9-50-7	4-Chloro-3-Memylphenel	20 U
91-87-6	2-Methylnashthalene	20 U
77-47-4	Hexachierocyclopentadiene	20 U
86-06-2	2.4.6-Trichlorophenel	20 U
96-95-4	2, 4, \$-Trichlerophener	100 U
91-50-7	2-Chiereneenmalene	20 U
29.74-4	2-Naroenikae	100 11
131-11-3	Dimethyl Phinelete	20 11
208-96-8	Acensonthylene	20 U
99-09-2	3-Narcenitine	100 U
12.00		

CAS Number		(Circle One)
23-32-9	Acensentnene	20 U
51-28-5	2. 4-Dingrephenel	100 U
100-02-7	4-Nitrophenol	100 U
132-64-9	Disensaturan	20 U
121-14-2	2. 4-Dimitrataluane	20 U
904-20-2	2. 6-Dinieratolyene	20 11
94-66-2	Diethylphthelate	20 U
7008-77-3	4-Chlorophenyl-phenylether	20 U
94-73-7	Fluerene	20 U
100-01-8	4-Nigreeniline	100 U
534-52-1	4. 6-Dinere-2-Methylehenel	100 U
96-30-6	N-Nitreediphenylamine (1)	
101-66-3	4-Bromophenyl-phenylether	
118-74-1	Hexachlorobenzene	20 11
37- 86 -8	Pentachlorephenel	100 U
85-01-8	Phenenthrene	50 N
120-12-7	Anthrecene	20 11
34-74-2	Di-n-Burylphthalate	20 U
208-44-0	Fluoranthene	20 U
129-00-0	Pyrene	20 U
95-48-7	Butylbenzylenmelete	
1-94-1	3. 3'-Dichlerobenzieine	20 U
54-55-3	BenezialAnthracane	
117-81-7	bis 2-Ethylhezvi Phthalate	20 U
218-01-9	Chrysone	20 U
117-84-0	Di-n-Octyl Phoneless	20 U
205-99-2	Benzolbifluoranthene	20 0
207-08-9	Senzalt If lugranthene	20 U
0-32-4	Benzotal Pyrene	20 U
193-39-5	Indenct 1. 2. 3-cd/Pyrene	20 U
3-70-3	Dibenza, NAMMesene	20 U
191-24-2	Benzolg, h. iPerviene	

Its-Connet be separated from digharylamine

ory Name	HAZLETON LABORATORIES RECEIVED A	77.2	Q	1020
-			•	1000

Sample Number EE 993

Organics Analysis Data Sheet (Page 3)

Pesticide/PCBs

Concentration Low Medium (Circle One)	GPC Cleanup DYes MNo
Deta Extracted Propered. 2-6-86	Separatory Funnel Extraction (Yes
Dete Anelyzed 2-13-86	Continuous Liquid - Liquid Extraction DYes
Conc/Dil Factor:	
Su consta Administrativo del constanti	

CAS Number		(US/Nor us /Kg (Circle One)
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 บ
319-86-8	Deta-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Meptechlor Epoxide	0.05 U
959-98-8	Endosulfan I	0.05 U
80-57-1	Dieldrin	0.10 U
72-55-9	4, 4'-DOE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosultan II	0.10 U
72-84-8	4, 4'-000	0.10 U
1031-07-8	Endoculten Sultate	0.10 U
50-29-3	4, 4'-001	0.10 11
72-43-5	Methoxychier	0.50 U
53494-70-5	Endrin Ketone	0.10 11
57-74-9	Chlordene	0.50 U
8001-35-2	Toxaphene	1.0 U
12674-11-2	Arecter-1016	0.50 U
11104-28-2	Arecler-1221	0.50 U
11141-16-5	Aroclor-1232	0.50 U
		0.50 U
12672-29-6	Arecter-1248	0.50 U
11097-69-1	Aroclor-1254	1.0 U
11096-82-5	Arecler-1260	1.0 U

V_j * Volume of extract injected (ul)

V_a = Volume of water extracted (ml)

W_a = Weight of sample extracted (g)

V_t = Volume of total entract (ul)

٧.	1000 m	er W	v, 10,000 ul	v. 4.001	
•		•	VE= 1000	Viti	

· · · · · · · · · · · · · · · · · · ·	tery Name:	HAZLETON LABORATORIES		•
10	lo [.]	5558	٠ -	•

Sample Number EE 993

Organics Analysis Data Sheet (Page 4)

RECEILED MERES

Tentatively Identified Compounds

A.S umber	Compound Name	Frection	Municipal Municipal States	Estimated Concentration (ug/l)br ug/lag)
123427	4-hydroxy- 4-methyl - 2- pentanone 4	BAN	205	23
	no volatiles found	VOA		
·				
				· · · · · · · · · · · · · · · · · · ·
417				
•				

V product of the aldol condensation of acctone

86 F P D 4 5 79

Serrete Number

E E 994

Organics Analysis Data Sheet (Page 1)

Laboratory Name HAZLETON LABORATURIES	Cese No:5338
Sample Matrix: WATER Data Release Authorized By: Data C. U.	Contract No: 68-01-7146 Deta Sample Received: 2-6-86
Voleti Concentration: La Date Extracted/Prep Date Analyzed: Conc/Dil Factor:	Compounds Circle One)

CAS Number	(ug/Ser ug/Kj (Circle One
74-87-3	Chloromethene	10 U
74-83-9	Bromomethene	10 U
78-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethene	10 U
76-00-2	Methylene Chloride	5 U
67-64-1	Acetone	10 U
75-15-0	Carbon Disulfide	5 U
78-38-4	1, 1-Dichloroethene	. 5 U
75-34-3	1, 1-Dichloroethene	5 U
156-60-5	Trans-1, 2-Dichlorosthens	5 U
67-66-3	Chloratorm	5 U
107-08-2	1, 2-Dichloroethene	5 U
78-93-3	2-Butsnane	10 U
71-\$5-6	1, 1, 1-Trichloroethene	5 U
56-23-5	Carbon Tetrachloride	5 U
108-06-4	Vinyl Acetste	10 U
78-27-4	Bromodichloromethane	5.0

CAS Number		ing/late	g/Kg
	1, 2-Dichloropropens	1	5 U
	Trans-1, 3-Dichloropropene		5 U
79-01-6	Trichlorosthene		5 U
124-48-1	Dibromochloromethene		5 U
79-00-5	1, 1, 2-Trichloroethane		5 U
71-43-2	Benzene		5 U
10061-01-5	cis-1, 3-Dichloropropens		5 11
110-75-8	2-Chloroethylvinylether		IO II
78-25-2	Bramafarm		5 U
108-10-1	4-Methyl-2-Pentanone		OU
591-78-6	2-Hexanone		OU
127-18-4	Tetrachioroethene		5 U
78-34-5	1, 1, 2, 2-Tetrachioroethane		5 U
108-86-3	Taluene	3 JA	K
108-90-7	Chlorobenzene		5 U
100-41-4	Ethylbenzene		5 U
100-42-5	Styrene	\	5 U
	Total Xylenes	25	X

Mrc

Date Reparang Qualifors

For reporting results to EPA. The following results qualifiers are used.
Additional Rope of featuress explaining regulas are ensouraged. However, the
definition of each flag must be explain.

- Value If the result is a value greater than or boust to the detection limit, resert the value.
- U Indicates compound was analyzed for but not detected. Report the management detection hims for the sample with the U to g. 10Ut based on necessary concentration /division action. (This is not necessarily the interrument detection fund.). The featness should read: U-Compound was analyzed for that not detected. The number is the neuronum attainable detection hims for the sample.
- J Indicates an estimated value. This flag is used either when estimating a concentration for sentatively identified compounds where a 1-1 response is assumed or when the mess spectral data indicated the presence of a compound that meets the identification orients but the result is less than the specified direction limit but greater than zero (a.g., 10J). It limit of direction is 10 µg·1 and a concentration of 3 µg/1 is conculated, report as 3J.
- C This Registeriors to presente personaters where the identification has been confirmed by GC MS. Single companions provides≥10 kg/ul in the final partiest provid to confirmed by GC MS.
- 8 This flag is used when the photose is found in the blank as well as a gample. It indicates passable -probable blank concommental and works the date user to take appropriate action.

Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

Laboratory Name	HAZLETON LABORATORIES
Page No:	5558

Semple Number EE 994

Organics Analysis Data Sheet (Page 2)

Semivoletile Compounds

Concentration: (Low) N	Medium (Circle One)	GPC Cleanup DYes BNo
Dote Extracted /Propered:	2-6-26	Separatory Funnel Extraction (IYes
Data Analysed:	2-6-86	Continuous Liquid - Liquid Extraction Yes
Conc/Dil Factor:		FEN ZIOTI
Percent Moisture (Decemed)	1950 .

CAS Number		og /) or ug /Rg (Circle One)
108-95-2	Phenol	20 U
111-44-4	bisi-2-ChlorosthvilEther	20 U
95-57-8	2-Chlorophenol	20 U
841-73-1	1 3-Dichlorobenzene	20 U
108-46-7	1, 4-Dichlorobensene	20 U
100-51-6	Senzyi Alcohol	20 U
95-50-1	1, 2-Dichlorobenzene	20 11
95-48-7	2-Methylphenol	20 U
39638-32-9	biol2-chlorosecorocyllEther	20 U
106-44-6	4-Memylphenol	20 U
821-84-7	N-Nrtraso-Di-n-Propylamine	20 U
67-72-1	Hexachleresthene	20 U
96-96-3	Narobenzene	20 U
78-86-1	tecoherene	20 U
88-75-5	2-Nitrophenel	20 U
105-57-9	2. 4-Dimethylphenol	20 U
68-85-0	Benzoic Azid	100 U
111-91-1	bist-2-ChloroethaxylMetheni	20 U
120-83-2	2. 4-Dichlorophenol	20 U
120-82-1	1, 2, 4-Trichlorobensene	20 U
91-20-3	Negrithelene	20 U
106-47-8	4-Chioroenvine	20 U
87-48-3	Herachiorobutadiene	20 U
59-90-7	4-Chlore-3-Methytenenel	20 U
91-57-6	2-Methylnaphthalene	20 U
77-47-4	Hexachlorocyclopentadiene	20 U
88-06-2	2, 4, 6-Trichlorophenel	20 U
95.96-4	2, 4, \$-Trichlorophenor	100 U
91-58-7	2-Chloronaphthalene	20 U
88.74-4	2-Nisroeniline	100 11
131-11-3	Dimethyl Phthalate	20 U
208-96-8	Acenephthylene	20 U
99-09-2	3-Naroaniline	100 U

CAS Number		Circle One
23-32-9	Acenephthene	20 U
61-29-5	2. 4-Dingraphenal	100 U
100-02-7	4-Nitrophenel	100 U
132-64-9	Dibenzofuren	20 U
121-14-2	2. 4-Dinitrotoluene	20 U
906-20-2	2, 6-Dinitrotpluene	20 U
94-96-2	Distriviphthalate	20 U
7005-72-3	4-Chiorophenyl-phenyletner	20 U
96-73-7	Fluorene	20 U
100-01-4	4-Nitroeniline	100 U
\$34-\$2-1	4, 8-Dimmo-2-Methylphenel	100 U
96-30-6	N-Nitrosodiphenylemine (1)	20 U
101-85-3	4-Bromophenyl-phenylemer	20 U
118-74-1	Hexachlorobenzene	20 U
87-86-8	Pentachiorophenol	100 U
85-01-8	Phenanthrone	20 U
120-12-7	Anthracene	20 U
34-74-2	Di-n-Butytohthalate	20 U
208-44-0	Fluorenthene	20 U
129-00-0	Pyrene	20 U
35-68-7	Butylbenzylghthelete	20 U
31-94-1	3.3'-Dichlorobenzidine	20 U
56-55-3	BenzalalAnthracene	20 U
117-81-7	bist2-EthylhexyllPhthalate	20 11
218-01-9	Chrysene	20 U
117-84-0	Di-n-Octyl Prithalate	20 U
205-99-2	Senzolbifluoranthene	20 U
207-08-9	Benzolk)Fluoranthene	20 U
30-32-8	BenzolaiPyrene	20 U
193-39-5	Indencia, 2, 3-cd/Pyrene	20 U
83-70-3	Dibenza hiAnthracene	20 U
191-24-2	Benzoig, h. ilPerviene	20 U

(1)-Connex be seconded from disherotement

Laboratory Name	HAZLETON LABORATORIES REC	EIVED ADD ?		
Case No	\$558	- NIK 2	g	1986

Sample Number EE 994

Organics Analysis Data Sheet (Page 3)

Pesticide/PCBs

	Medium (Circle One)	GPC Cleanup DYes MNo
Date Extracted / Prepared:	2-6-86	Separatory Funnel Extraction (A)Yes
Date Analyzed:	2-12-86	Continuous Liquid - Liquid Extraction @Yes
Conc/Dil Factor:		
Percent Moisture (decant	ed)	

319-84-6 Alpha-BHC 0.0 319-85-7 Beta-BHC 0.0 319-86-8 Detta-BHC 0.0 58-89-9 Gamma-BHC (Lindane) 0.0 76-44-8 Heptachlor 0.0 309-00-2 Aldrin 0.0	05 U 05 U 05 U 05 U 05 U 05 U
319-85-7 Beta-BHC 0, (319-86-8 Detta-BHC 0, (58-89-9 Gamma-BHC (Lindane) 0, (76-44-8 Heptachlor 0, (309-00-2 Aldrin 0, (1024-57-3 Heptachlor Eposide 0, (05 U 05 U 05 U 05 U 05 U
319-86-8 Delta-BHC 0.0 58-89-9 Gamma-BHC (Lindane) 0.0 76-44-8 Heptachlor 0.0 309-00-2 Aldrin 0.0 1024-57-3 Heptachlor Eposide 0.0	05 U 05 U 05 U
58-89-9 Gamma-BMC (Lindane) 0.0 76-44-8 Heptachlor 0.0 309-00-2 Aldrin 0.0 1024-57-3 Heptachlor Epoxide 0.0)5 U)5 U)5 U
76-44-8 Heptachlor 0.0 309-00-2 Aldrin 0.0 1024-57-3 Heptachlor Eposide 0.0)5 U)5 U
309-00-2 Aldrin 0.0 1024-57-3 Heptachlor Eposide 0.0)5 U
1024-57-3 Megtachlor Eposide 0.0	
	15 11
959-96-8 Endosultan I . 0,0	/ - U
	15 U
80-57-1 Dieldrin (),1	0 U
72-55-9 4.4'-DDE 0.1	0 U
72-20-8 Endrin 0.1	0 U
33213-65-9 Endosulfan II 0.1	0 11
72-84-8 4.4'-000 0.1	0 U
1031-07-8 Endosulfan Sulfate 0.1	0 U
50-29-3 4.4'-DOT 0.1	O U
72-43-5 Methorychlor 0.5	0 U
53494-70-5 Endrin Ketone 0.1	0 4
57-74-9 Chlordane 0.5	0 11
9001-35-2 Texaphene 1.0	
12674-11-2 Aroctor-1016 0.5	
11104-28-2 Aroclor-1221 0.5	
11141-16-5 Aroclor-1232 0.5	
53489-21-9 Aroctor-1242 0.5	6
12672-29-6 Aroclor-1248 0.5	0 U
11097-69-1 Arocior-1254 1.0	U
11096-82-5 Aroclor-1260 1.0	U

V_i = Volume of extract injected (ul)

V_e = Volume of water extracted (ml)

W_g = Weight of sample extracted (g)

V, - Volume of total extract (ul)

v. 1000 ml w v. 10,000 vl v. 4	1.0.1
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Nor	y Name.	HAZLETON	LABORATORIES	
No		55	58	

Sample Number EE 994

Organics Analysis Data Sheet (Page 4)

Tentatively Identified Compounds

RECEIVED APR 2 9 1986

AS under	Compound Name	Prection	Att or Scan	Estimated Concentration (ug/1) or ug/bg
123422	4-hydroxy- 4-methyl - 2-pentanone	BAN	205	33
	no volatiles found	VOA		
· · · · · · · · · · · · · · · · · · ·				

product of the aldol condunsation of accetone

TEFPOYD	78
Sample Number	
EG 536	
RECEIVED APE ?	•

Organics Analysis Data Sheet (Page 1)

Laboratory Name HAZLETON LABORATORIES	Case No: 5558 1986
Lab Sample ID No: 60201137 Sample Matrix: WATER	OC Report No:
Date Release Authorized By: David C. Will	Date Sample Received: 2-6-86
Volatile Co	· ·
Concentration: Low Date Extracted/Prepared:	Medium (Circle One) 2-8-86 FRN 30169
Date Analyzed:	
Conc/Dil Factor:	BH
Percent Moisture: (Not De	icamed)

CAS Number		Circle One
74-\$7-3	Chloromethene	10 U
74-83-9	Bromomethene	10 U
76-01-4	Vinyl Chloride	10 U
75-00-3	Chlorosthane	10 U
76-08-2	Methylene Chloride	5 U
87-84-1	Acetone	10 U
75-18-0	Carbon Disulfide	5 0
75-35-4	1, 1-Dichloroethene	· 5 U
75-34-3	1, 1-Dichlorostherre	5 U
156-80-5	Trans-1, 2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-08-2	1, 2-Dichlorosthere	5 0
78-93-3	2-Butanone	10 U
71-55-6	1, 1, 1-Trichloroethene	5 U
56-23-5	Carbon Tetrachioride	5 0
108-05-4	Vinyl Acetate	10 U
78-27-4	Bromodichloromethane	5 U

CAS Number		ug/lerug/Kg (Circle One)
78-87-5	1, 2-Dichloropropene	5 U
10061-02-6	Trans-1, 3-Dichleropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethene	5 U
79-00-5	1. 1. 2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1, 3-Dichloropropene	5 11
110-78-8	2-Chloroethylvinylether	10 U
78-25-2	Bramafarm	5 11
108-10-1	4-Methyl-2-Pentanone	10 U
591-78-6	2-Hexanone	10 U
127-18-4	Tetrachioroethene	5 U
79-34-5	1, 1, 2, 2-Tetrachioroethane	5 U
108-86-3	Toluene	4 85 84
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	25154

Nou

Date Reserving Qualiforts

For reporting results to BPA, the following results qualifiers are used. Additional Rogs or featuress employing results are presuraged. However, the definition of each flag must be emploit.

- Makes If one result is a value grainer than or equal to the detection limit, report the value.
- U Indicates compound was analyzed for but not detected. Report the security measurement detection time for the semate with the U leg., 10U) based on recessary concentration / division ection. (This is not necessarily the instrument detection time). The feathers that read U-Compound was analyzed for but not detected. The number is the manner attainable detection time for the semate.
- J Indicates an estimated value. This flag is used either when optimating a concentration for tentatively identifies compounds where a 1-1 response is assumed or when the mess spectral date indicated the presence of a compound that mests the identification greater but the rout is less than the specified direction that but greater then zero (e.g., 10.0). If finite of direction is 10 µg : I and a generation of 3 µg /1 is coldulated, report as 3.0.
- © This Reg approx to posticide parameters where the identification has been confirmed by GC MS. Single companion posticides ≥10 kg/ul in the final exercit should be confirmed by GC MS.
- 8 This flag is used when the another is found in the blonk as well as a gample. It indicates possible greacole blonk concernments and words the data user is take appropriets action.
- Other specific flags and footnesss may be required to present deline the results. If used, they must be fully described and such description attached to the data summery report.

	7	ECEIVED	
Leberatory Nam	HAZLETON LABORATORIES	ECEIVED APR 2 9 1986	Semple Number
Case No:	3558	- 1986	E6 536
•	O	naturia Duar Obara	

Organics Analysis Data Sheet (Page 2)

Semivolatile Compounds

Concentration: (Low) Med	ium (Circle Une)	GPC Cleanup Cites Iano
Date Extracted Prepared:	2-6-96	Separatory Funnel Extraction (EYes
Date Analysed:	2-6-86	Continuous Liquid - Liquid Extraction DYes
Cone/Dil Factor:		_PEN 27073
Barner Maisture (Decement)		_ 1637

CAS Number	(ug/Jor ug/Kg Circle One
108-95-2	(Page)	20 U
111-44-4	Phenol bisi-2-ChlorosthvilEther	20 U
95-57-8	2-Chlorophenol	20 U
841-73-1	1 3-Dichlorobenzene	20 U
106-46-7		20 U
100-81-4	1, 4-Dichlorobengene Benzyl Alcohol	20 U
96-50-1	1. 2-Dichlorobenzene	20 U
96-48-7		20 U
	2-Methylphenal biol2-chloroscopropyliEther	20 U
39638-32-9		20 0
106-44-5	4-Memylehenel N-Nitreso-Di-n-Presylemine	20 U
		20 U
67-72-1	Hexachloreethene	
90-95-3	Narobenzene	20 U
78-59-1	lecoherone	20 U
29-75-5	2-Nitrophenol	
106-57-9	2. 4-Dimethylphenol	20 U
68-65-0	Benzoic Acid	
111-91-1	bis - 2-Chloroethoxy Methans	20 U
120-83-2	2. 4-Dichlorophenel	
120-82-1	1, 2 4 Trichlorobenzene	20 U
91-20-3	Magneheiene	20 U
108-47-8	4-Chloroeniline	والمساد المراسية
87-68-3	Mexachieroputadiene	20 U
89-50-7	4-Chloro-3-Methylohenol	
91-57-6	2-Memyinaphthalene	20 U
77-47-4	Hexachiorocyclopentadiene	والمستقد ويبهيه
88-06-2	2.4.6-Trichlorophenel	20 U
95-96-4	2. 4. \$-Trichlorophenor	100 U 20 U
91-58-7	2-Chioronaonthalene	
88-74-4	2-Nerroenshine	100 U
131-11-3	Demethyl Phrhalate	
208-96-8	Acenephthylene	
99-09-2	3-Narcemine	100 U

CAS		(19/1) or 119/169
Number (83-32-9	Aconsprinone	Circle One
61-20-5	2. 4-Dinitrophenol	100 U
100-02-7	4-Nitrophenol	100 U
132-44-9	Dipenzoluran	20 U
121-14-2	2. 4-Dinitrotaluene	20 U
908-20-2	2. 8-Dimitratelyene	20 U
34-66-2	Distriviphthelate	20 U
7005-72-3	4-Chlorophenyl-phenylether	20 U
96-73-7	Fluorene	20 U
100-01-4	4-Nicroenitine	100 U
134-12-1	4, 8-Dinstro-2-Methylphenel	100 U
96-30-6	N-Nitrosodiphenylemine (1)	20 U
101-65-3	4-Bromophenyl-phenylether	20 U
118-74-1	Mexachlorobenzene	20 U
\$7-06-\$	Pentachiorophenol	100 U
95-01-8	Phenanthrene	20 U
120-12-7	Anthracene	20 11
24-74-2	Di-n-Butylphthalate	20 U
206-44-0	Fluoranthene	20 U
129-00-0	Pyrene	20 U
25-48-7	Butylbenzylphthalate	20 U
31-94-1	3.3'-Dichigropenzidine	20 U
56-55-3	Benzola jAnthracene	20 U
117-81-7	bist2-EthylhexyllPhthalate	20 U
218-01-9	Chrysene	20 U
117-84-0	Di-n-Octyl Phthelate	20 U
205-99-2	Senzo(b)Fluoranthene	20 U
207-08-9	BenzorkiFluorammene	20 U
30-32-8	Benzo(s)Pyrene	20 U
193-39-5	Indenati. 2. 3-adiPyrene	20 U
33-70-3	Dibenzia, hiAnthracene	20 U
191-24-2	Benzoig, h. iPerviene	20 U

[1]-Connet be separated from dunonylamina

HAZLETON LABORATORIES RECEIVED ADD		
TO APR	2.9 ****	Sample Number
Cese No	- 3 1986	EC 536

Organics Analysis Data Sheet (Page 3)

Pesticide/PCBs

Concentration: (Low Medium (Circle One)	GPC Cleanup 🗆 Yes 💆 No
Deta Extracted Propered 2-6-86	Separatory Funnel Extraction (X) Yes
Dets Analysed: 2-12-86	Continuous Liquid - Liquid Extraction DYes
Conc/Dil Factor:	
Percent Moisture (decamed)	

CAS Number		(Circle One
319-84-6	Alpha-BHC	0.05 U
319-85-7	Beta-BHC	0.05 U
319-86-8	Dena-BHC	0.05 U
58-89-9	Gamma-BHC (Lindane)	0.05 U
76-44-8	Heptachlor	0.05 U
309-00-2	Aldrin	0.05 U
1024-57-3	Heptachlor Epoxide	0.05 U
959-98-8	Endosultan I	0.05 U
80-57-1	Dieldrin	0.10 U
72-55-9	4, 4'-DDE	0.10 U
72-20-8	Endrin	0.10 U
33213-65-9	Endosulfan II	0.10 U
72-84-8	4, 4'-000	0.10 U
1031-07-8	Endosulfan Sulfate	0.10 U
80-29-3	4, 4'-007	0.10 U
72-43-5	Methoxychlor	0.50 U
53494-70-5	Endrin Ketone	0.10 U
57-74-9	Chlordane	0.50 U
9001-35:2	Toxaphene	1.0 U
12674-11-2	Araciar-1016	0.50 U
11104-28-2	Aroctor-1221	0.50 U
11141-16-5	Araclar-1232	0.50 U
53469-21-9		0.50 U
12672-29-6	Aroclor-1248	0.50 U
11097-69-1	Arocior-1254	1.0 U
11096-82-5	Aroclor-1260	1.0 U

V_i = Volume of extract injected (ul)

Vg = Volume of water extracted (ml)

W_g * Weight of sample extracted (g)

V, * Volume of total extract (ul)

v ,	1000 m	«W _s	v. 10,000 ul	v, 4.0 vl
------------	--------	-----------------	--------------	-----------

RECEIVED APR 2 9 1986

86FP04 RID Semple Number EG537

Organics Analysis Data Sheet (Page 1)

Laboratory Name HAZLETON LABORATORIES	Case No: 5558
Lab Sample ID No: 60201138	QC Report No:
Semple Matrix: WATER	Contract No: 68-01-7146
Data Release Authorized By: David C. Lill	Date Sample Received: 2-6-B6
Volatile Co	
Concentration: (Low)	Medium (Circle One)
Date Extracted/Prepared:	2-8-86 FRN 30170
Date Analyzed:	
Conc/Dil Factor:	pH
Percent Moisture: (Not De	cented)

CAS Number		ug/I dr ug/Kg (Circle One)
74-87-3	Chloromethene	10 U
74-83-9	Bromomethene	10 U
78-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethene	10 U
75-09-2	Methylene Chloride	5 U
67-64-1	Acetone	10 U
78-18-0	Cerbon Disulfide	5 4
78-35-4	1, 1-Dichlaraethene	5 U
78-34-3	1, 1-Dichloroethene	5 U
156-60-5	Trans-1, 2-Dichloroethene	5 U
67-46-3	Chloroform	5 U
107-08-2	1, 2-Dichloroethene	5 U
78-93-3	2-Butanone	10 U
71-85-6	1, 1, 1-Trichloroethene	5 U
56-23-5	Carbon Tetrachloride	5 0
108-05-4	Vinyl Acetate	10 U
78-27-4	Bromodichloromethene	5 U

CAS Number	(Circle One	<u> </u>
78-87-5 .	1, 2-Dichloropropene	5 U	3
10061-02-6	Trans-1, 3-Dichloropropens	5 U]
79-01-4	Trichloroethene	5 U	3
124-48-1	Dibramechloramethene	5 U	3
79-00-5	1, 1, 2-Trichleroethane	5 U	3
71-43-2	Benzene	5 U]
10061-01-5	eis-1, 3-Dichloropropens	5 11	}
110-75-8	2-Chloroethylvinylether	10 11	}
78-25-2	Bramafarm	5 U]
108-10-1	4-Methyl-2-Pentanone	10 U]
591-78-6	2-Hexanone	10 U]
127-18-4	Tetrachioroethene	5 U]
78-34-5	1, 1, 2, 2-Tetrachioroethane	5 U	1.
108-86-3	Toluene	2 87 5-4	MO
108-90-7	Chlorobenzene	5.0	
100-41-4	Ethylbensene	5 U]
100-42-5	Styrene	5 U]
	Total Xylenes	5 U]

Date Reporting Contillant

For reparting results to SPA, the following results qualifiers are used. Additional Rogs or features explaining results are announced. However, the definition of each flag must be explicit.

- Value If the result is a value greater then or equal to the detection limit, report the value
- U Indicates compound was analyzed for but not detected. Reserv the stummum associate function for the sample with the U is g. 10UI based on necessary concentration / dilution access. (This is not necessarily the instrument detection funct.) The features should real? U-Compound was analyzed for but not detected. The number is the minimum attainable detection think for the symple.
- J Injuryon an optimized value. This flag is used either when estimating a concentration for tentatively isometries compounds where a 1-1 response is assumed or when the most spectral date injuryon the prosence of a compound that most the dentification criteria but the result is less than the specified detection while but greater than zero (e.g., 10J). If time of detection is 10 µg·1 and a concentration of 3 µg/1 is calculated, report as 3J.
- C This flag appries to patential parameters where the identification has been confirmed by GC MS. Single companion posterios≥10 ng rul in the final outract should be confirmed by GC MS.
- 8 This flag is yeast when the analyse is found in the blank as well as a gample. It indicates possible i probable blank concomments and works the case upor to take appropriate action.

Other specific flags and feathers may be required to properly define the require. If used, they must be fully described and such description effected to the data summary report.

~	Name	HAZLETON	LABORATORIES
,,			
		\$5	<i>5</i> %

Sample Number EG 536

Organics Analysis Data Sheet (Page 4)

RECEIVED APR 2 9 1990

Tentatively Identified Compounds

.S mber	Compound Name	Praction	RT or Scan Number	Estimated Concentration (ug/l)br ug/bg)
123422	4- hydroxy- 4-methyl- 2-pentanone.	BAN	206	26
	no volatiles found	VOA		
·				

^{*} product of the aldol condensation of ecutone

HAZLETON LABORATORIES RECEIVED APR 2 9 1986

Sample Number EG 537

Organics Analysis Data Sheet (Page 2)

Semivolatile Compounds

Concentration: Low Med	lium (Circle One) 2-6-86	Separatory Funnel Extraction (SYes
Date Exercised /Prepared:	2-6-84	Continuous Liquid - Liquid Extraction (1)Yes
Date Analysed:		Fen 27074
Conc/Dil Factor:		1726
Barrer Moissure (Decarsed) -		

CAS	G	a/letus/Ke
Number		(Circle One)
108-95-2	Phenol	20 U
111-44-4	bisi-2-ChloroethvilEther	20 U
95-57-8	2-Chlorophenol	20 U
841-73-1	1 3-Dichlorobenzene	20 U 20 U
106-46-7	1. 4-Dichlorobenzene	
100-81-4	Senzyl Alcohol	20 U
95-50-1	1, 2-Dichlorobenzene	20 U
95-48-7	2-Memylphenel	
39638-32-9	buil2-chlorouscorosyllEther	20 U
106-44-8	4-Memylehenel	
621-64-7	N-Narces-Di-n-Procylemine	20 U
67-72-1	Herachieroethane	20 U
90-95-3	Narobensene	20 U
78-59-1	Iscoherene	20 U
89-78-8	2-Narashensi	20 U
105-67-9	2. 4-Dimethylphenal	100 U
85-85- 0	Bensoic Acid	
111-01-1	brel-2-Chloroethouv Methani	20 U
120-83-2	2. 4-Dichlerophenel	20 U
120-82-1	1. 2. 4 Trichlorobenzene	20 U
91-20-3	Negrithelene	20 U
108-47-8	4-Chioreendine	20 U
87-48-3	Hexachiorobutadiene	20 U
89-80-7	4-Chiero-3-Methylphenel	20 U
91-57-6	2-Methythaphthalene Hexachlorocyclopentaciene	20 U
77-47-4	2 4. 6-Trichlorophenol	20 U
88-06-2	2. 4. 5-Thehiorophenor	100 U
95-95-4	2. 4. 9-Inchiarophero.	20 U
91-58-7		100 U
88.74-4	2-Nerroenikne	20 U
131-11-3	Dimethyl Phthalate	20 U
208-96-8	Acensohmylene	100 U
99-09-2	3-Naroensine	

CAS		ug /1 for ug / Kg (Circle One)
Number 23-12-9	Acenaphtnene	20 U
\$1-28-5	2. 4-Dinitrophenol	100 U
100-02-7	4-Narophenol	100 U
132-64-9	Dipenzoluren	20 U
121-14-2	2. 4-Dinerotaluene	20 U
906-20-2	2 6-Dinitratolyene	20 U
94-98-2	Distrytphthelate	20 U
7005-72-3	4-Chloropherni-phenylether	20 U
36-73-7	Fluorene	
100-01-6	4-Nigroenitine	100 U
534-52-1	4. 6-Dinare-2-Methylphene	
96-30-4	N-Nitroeodiphenylemine (1)	20 U
101-65-3	4-Bromophenyi-phenyiether	20 U
118-74-1	Hexachlorobenzene	20 U 100 U
87-86-5	Pentachlorophenol	20 U
85-01-8	Phenenthrene	20 U
120-12-7	Anthrecene	20 U
34-74-2	Di-n-Burylphmalate	20 U
206-44-0	Fluoranthene	20 U
129-00-0	Pyrono	20 U
25-48-7	Burytenzylehthalate 3.3'-Oichlorobenzidine	20 U
91-94-1	3 3 -Off-House and	20 U
36-55-3	bist2-Ethylhesvi)Phthalate	20 U
117-81-7	Chrysene Chrysene	20 U
218-01-9	Di-n-Octyl Phonalate	20 U
117-84-0	Benzo(b)Fluoranthene	20 U
205-99-2	BenzolkiFluoranthene	20 U
207-08-9	Benzola Pyrene	20 U
50-32-8	Indenati. 2. 3-cd)Pyrene	20 U
193-39-5	Dibenzia, hiAnthracene	20 U
191-24-2	Benzolg, h. iPerviene	20 U
131-54-5		

(1)-Connex be separated from dighterylamine

Case No 5558	ETON DABORATOR	RIESECEIVED !	APR 2 9 issb	Semple Number EG 557
	Org	anics Analysis ((Page 3)	Data Sheet	20 337
		Pesticide/PC	Bs	
Concentration (Low)	Medium (Circ	cle One)	GPC Cleanup DYes DN	0
Date Extracted / Prepared	2-6-86		Separatory Funnel Extra	ction Myes
	2 - 12 -86			•
PO10 ~ 0.7100 <u>======</u>	1		Continuous Liquid - Liqu	NO Extraction Lives
Conc/Dil Factor:				
Percent Moisture (decente	M)			
	CAS Number		(Circle One)	
	B19-84-6	Alpha-BHC	0.05 U	:
	319-85-7	Beta-BHC	0.05 U	
	319-86-8	Detta-BHC	0.05 U	
	88-89-9	Gamma-BHC (Lindar	• 0.05 U	
	76-44-8	Heptachlor	0.05 U	
•	309-00-2	Aldrin	0.05 U	
	1024-57-3	Heptachlor Epoxide	0.05 U	
	959-90-8	Endosulfan I	0.05 U	
	80-57-1	Dieldrin	0.10 U	
	72-55-9	4.4'-DDE	0.10 U	
	72-20-8	Endrin	0.10 U	•
	33213-85-9 72-54-8	Endosulfan II	0.10 u	
	1031-07-8	Endosulfan Sulfate	0.10 U 0.10 U	
	50-29-3	4.4'-007	0.10 U	
	72-43-5	Methoxychior	0.50 U	
	53494-70-5		0.10 U	
	57-74-9	Chlordane	0.50 U	
	8001-35-2	Toxaphene	1.0 U	

V_i * Volume of extract injected (ul)

0.50 U

12674-11-2 Aroctor-1016 11104-28-2 Aroctor-1221 11141-16-5 Aroctor-1232 53469-21-9 Aroctor-1242

12672-29-6 Arocior-1248 11097-89-1 Arocior-1254 11096-82-5 Arocior-1260

V_a = Volume of water extracted (ml)

Wg = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

٧,	1000 ml	or W.		v. 10,000 ul	v. 4.0 ul	
----	---------	-------	--	--------------	-----------	--

HAZLETUN LABUKATUKTES	
5558	

Sample Number EG 637

Organics Analysis Data Sheet (Page 4)

RECEIVED APR 2 9 1986

Tentatively Identified Compounds

A.S writter	Campound Name	Prection	Att or Scan	Estimated Concentratio (ug/1) or ug/by
123422	4- hudroxy- 4-methyl- 2- pentanone *	BAN	208	13
	Unknown	YOA	65	52
				
				
				·
•				
-				

^{*} product of the oldol condensation of acetone.

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86 F P O Y 580 Sample Number E G 538

Organics Analysis Data Sheet (Page 1)

5 3 3 8	
Contract No: 68-01-7146 Data Sample Received: 2-6-86	
FRN 80171 1710	

CAS Number		Ug/ler ug/Kg Circle One
74-87-3	Chloromethene	10 U
74-83-9	Bromomethene	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chiorosthens	10 U
75-09-2	Methylene Chloride	5 U
67-64-1	Acetone	10 U
78-18-0	Carbon Disulfide	5 U
78-36-4	1. 1-Dichloroethene	· 5 U
75-34-3	1, 1-Dichloroethene	5 U
156-60-5	Trans-1, 2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-08-2	1, 2-Dichloresthane	5 U
78-93-3	2-Butanone	10 U
71-66-6	1, 1, 1-Trichloroethene	5 U
56-23-5	Carbon Tetrachloride	5 0
108-06-4	Vinyl Acetste	10 U
78-27-4	Bromodichloromethane	5 U

CAS Number	(Gircle One)
78-87-5 .	1, 2-Dichloropropene	5 U
10061-02-6	Trans-1, 3-Dichleropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethene	5 U
79-00-5	1, 1, 2-Trichloroethene	5 U
71-43-2	Benzene	5 11
10061-01-5	cis-1, 3-Dichloropropene	5 II
110-75-8	2-Chloroethylvinylether	10 U
76-25-2	Bromelerm	5 11
108-10-1	4-Methyl-2-Pentanone	10 U
591-78-6	2-Hexanone	10 U
127-18-4	Tetrachiaroethene	5 U
79-34-5	1, 1, 2, 2-Tetrachloroethane	5 U
108-86-3	Taluene	285
108-90-7	Chlorobenzene	5 11
100-41-4	Estryibenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	145

POTC

Date Reporting Cardiffers

For reporting results to EPA, the following results qualifiers are used. Additional flags or feathering seathering results are orientaged. However, the definition of each flag must be explice.

- Walker If the result is a value greater than or equal to the desection limit, report the value.
 - g Indicates compound was analyzed for but not describe. Report the structure describe time for the sample with the U is g. 10UI based on necessary concoversion / dilution access; (This is not necessarily the interpreted describe (mit.). The features should rest: U-Compound was analyzed for but not describe. The number is the simple interpreted describes time for the sample.
 - a processe on opposed value. This flag is used either when expineting a concentration for tentestively described compounds where a 1-1 respected is assumed or when the most spectral data injuries the presence of a compound that meets the identification creams but the result is less man the specified detection limit but graces than zero (e.g., 10.0). If limit of detection is 10 µg·1 and a gencentration of 3 µg/1 is calculated, report to 3.0.
- C This Reg applies to passicide parameters where the identification has been confirmed by GC MS. Single compenent posticides 210 lig rul in the final outract should be confirmed by GC MS.
- 8 This flag is used when the analyte is found in the blank as wall as a sample. It indicates possible i probable blank consommation and waters the data user to take appropriate action.

Other specific flags and festinens may be required to properly define the results. If used they must be fully described and such description attached to the gast summery report.

Laborator	y Name	HAZLETON LABORATORIES
Case No:		5558

Sample Number EG 538

Organics Analysis Data Sheet (Page 2)

Semivolatile Compounds

RECEIVED APR 2 9 1986

Concentration: (Low Me	dium (Circle One)	GPC Cleanup CYes (DNo
Data Extracted /Prepared:		Separatory Funnel Extraction @Yes
Date Analysed:	2-6-86	Centinuous Liquid - Liquid Extraction @Yes
Cone/Dil Factor:		FRN 27075
Parent Moisture (Decarted)		_1614

CAS Number		10 / Sr ug / Kg
108-95-2	Phenol	20 U
111-44-4	bist-2-ChloroethvilEther	20 U
95-57-8	2-Chlorophenol	20 U
\$41.73.1	1 3-Dichlorobengene	20 U
106-46-7	1. 4-Dichlorobengene	20 U
100-\$1-6	Bensyl Alcohol	20 U
96-50-1	1. 2-Dichlorobensene	20 U
95-48-7	2-Methylphenol	20 U
39638-32-9	bial2-chigroissprosyllEther	20 U
106-44-5	4-Memylphenal	20 U
621-64-7	N-Nitroso-Di-n-Propylamine	20 U
67-72-1	Hexachloraethane	20 U
96-95-3	Nitrobensene	20 U
78-59-1	lecohorone	20 U
88-78-5	2-Nitrophenol	20 U
106-67-9	2. 4-Dimethylphenal	20 U
65-65-0	Benzoic Acid	100 U
111-91-1	bra - 2 - Chloroethoxy Methans	
120-63-2	2. 4-Dichlorophenal	20 U
120-62-1	1. 2. 4-Trichlorobensene	20 U
91-20-3	Naghthelene	20 U
108-47-8	4-Chioroeniline	20 U
87-48-3	Hexachierobutadiene	20 U
59-50-7	4-Chiero-3-Methylphenol	20 U
91-57-4	2-Methylnsomhalene	20 U
77-47-4	Hexachlorocyclopentatione	20 U
86-06-2	2.4.6-Trichlarophenal	20 U
95.95-4	2, 4, 5-Trichlorophenor	100 U
91-58-7	2-Chioronsonthalene	20 U
88-74-4	2-Nirrosnihne	100 11
131-11-3	Dimethyl Phthalate	20 U
208-96-8	Acenephthylene	20 U
99-09-2	3-Narosnikas	100 U

CAS Number		ug/I år ug/Kg Cirele One!
(83·32·0	Acensprinere	20 U
\$1-28-5	2. 4-Dinstrophenol	100 U
100-02-7	4-Nitrophenol	100 U
132-64-9	Dibensoluren	20 U
121-14-2	2. 4-Dinitrataluene	20 U
906-20-2	2. 6-Dinitrotolusne	20 U
94-66-2	Disthylphthelate	20 U
7005-72-3	4-Chiorophenyl-phenylether	20 U
96-73-7	Fluorene	20 U
100-01-8	4-Nigroendine	100 U
834-52-1	4. 6-Dinitro-2-Methylanenal	_100 U
96-30-4	N-Nitrosodiphenylemine (1)	20 U
101-55-3	4-Bromopheryl-phenylether	20 U
118-74-1	Hexachioropensene	20 U
87-86-5	Pentachierophenel	100 U
85-01-8	Phenanthrene	20 U
120-12-7	Anthracene	20 11
84-74-2	Di-n-Burylonmalate	20 U
206-44-0	Fluoranthene	20 U
129-00-0	Pyrene	20 U
95-48-7	Butylbenzylphthelate	20 U
31-94-1	3. 3'-Dichlorobenzidine	20 U
56-55-3	Benzola Anthracene	20 U
117-81-7	bist2-EthylhesvilPhthalate	20 U
218-01-9	Chrysene	20 U
117-84-0	Di-n-Octyl Prithelate	20 U
205-99-2	Benzolb/Fluoranthene	20 U
207-08-9	BenzorkiFluoranthene	20 U
BO-32-8	Benzola Pyrene	20 U
193-39-5	Indenot1, 2, 3-od)Pyrene	20 U
53-70-3	Dibenzia hiAnthracene	20 U
191-24-2	Benzoig, h. ilPerviene	20 U

[1]-Cannot be separated from demanylaming

Laboratory	Name	HAZLETON	LABORATORIES	 -
Casa Na	_			

EG 538

Organics Analysis Data Sheet

		(Page 3)	
_		Pesticide/PC	Bs
Concentration Low Medium (Circle One)			SPC Cleanup DYes No
Dete Extracted / Prepared	0-6-86		Separatory Funnel Extraction (Ves
2 .2	:6	_	
1	<u> </u>		Continuous Liquid - Liquid Extraction DYes
Conc/Dil Fector:			8EC=
Percent Moisture (decemed)			CELIVED APO 2
	CAS Number		RECEIVED APR 2 9 1986 (Circle One)
	319-84-6	Alpha-BHC	0.05 U
	319-85-7	Beta-BHC	0.05 U
	319-86-8	Detta-BHC	0.05 U
	58-89-9	Gamma-BHC (Lindani	0.05 U
	76-44-8	Heptachior	0.05 U
•	309-00-2	Aldrin	0.05 U
	1024-57-3	Heptachlor Eponide	0.05 U
	959-98-8	Endosulfan I	0.05 U
	60-57-1	Dieldrin	0.10 U
	72-55-9	4. 4'-DDE	0.10 U
	72-20-8	Endrin	0.10 U
	33213-65-9	Endosulian II	<u> </u>
	72-54-8	4, 4'-000	0.10 U
	1031-07-8	Endosulfan Sulfate	0.10 U
	50-29-3	4. 4'-DDT	0.10 U
	72-43-5	Methoxychler	0.50 U
	53494-70-5		0.10 11
	57-74-9 8001-35-2	Chiordane Toxaphene	0.50 U
	12674-11-2	Aroclor-1018	0.50 U
	11104-28-2		0.50 U
		Aroclor-1232	0.50 U
		Arocior-1242	0.50 U
	12672-29-6		0.50 U
	11097-69-1	Arocior-1254	1.0 U
	11096-82-5	Arocior-1260	1.0 U
•	V _s	 Volume of extract in Volume of water ext Weight of sample ex 	tracted (ml)

v	1000ml	or W,		V.	10,000 ul	٧	4.00/
---	--------	-------	--	----	-----------	---	-------

nory Name	HAZLETON LABOR	RATORIES	-	•	
No	5558		-		
		Organics Ans	alysis	Data	Sheet

Sample Number EG 5 38

(Page 4)

Tentatively Identified Compounds RECEIVED APR 2 9 1986

AS Number	Compound Name	Prection	NT or Scan	Estimated Concentration (ug/I) or ug/leg
123422	4-hydroxy-4-methyl- 2-pentanone #	BW	206	lb
	no volatiles found	VOA		
•				
			·	
				

If product of the aidol condensation of acetone

CASE NUMBER _	<i>5</i> 558		
		1/ upstream sample just show Chemical property SAMPLING TIME 16	1
SAMPLE #/STAT10	IN LOCATION $3W-3$	upstream sample just	beyond fence
	off fors	show themical property	,150
SAMPLING DATE _	2-5-86	SAMPLING TIME 16	42
	FFIC_NUMBERI	186 197 .	
INUKGANIC	KAPPIC NUMBER	10 11	
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
8002.jug	organics - P.P.	5-45316,5-45315	15312052
40 ml. vial	organics-P.P.	5-45318,5-45317	25261302
Liter	metals	5-45319	35317452
			l
			1
	İ		İ
			İ
	i		<u> </u>
		<u> </u>	<u> </u>
PHYSICAL DESCR	IPTION AT TIME OF CO	LLECTION:	
•			
PHYSICAL CHANGE	ES FROM TIME OF COLL	ECTION UNTIL SHIPMENT:	
	DINGS		
pH 6.	5		
	375 umlas		
TEMPERATURE	3°C.		

CASE NUMBER		ry Systems/Black Rive	
ASE NUMBER _	5>>0		
SAMPLE #/STATIO	N LOCATION Dupli	cate for SW-Z Mi	dstream sample
	from	bank at center of rive	er-front near cut
SAMPLING DATE _	2-5-86	SAMPLING TIME #	550 -1670
ODCANIC TOA	FETC NIMRED	F 6 536	
T NORGANIC T	FFIC NUMBER RAFFIC NUMBER	ME G 195 .	
I HORGARIO	_		
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
800z-jug	organics - P.P.	5-45346,5-453	15 15312052 /
40 ml. vial	VOA	15-45348,5-453	47 25761302
Liter	metals	15-45350	35317452
	1		
			1
PHYSICAL DESCRI	PTION AT TIME OF C	DILECTION:	
· ·			
			
PHYSICAL CHANGE	S FROM TIME OF COL	LECTION UNTIL SHIPMENT:	
THETOIRED T DEAF	INGS		
INSTRUMENT READ			
pH 6.4	~400 umlos		

_	5558	y Systems/Black River	
SAMPLE #/STATIO	ON LOCATION SW-	2 Midstream sunde	near outlall
SAMPLING DATE	z-5-86	SAMPLING TIME /4	20
ORGANIC TRA	AFFIC NUMBER	E 993	
	RAFFIC NUMBER	AEG 198 .	
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
80 oz. jug	organics-P.P.	5-45341,5-45340	15312052
40 ml. vial	VOA	15-45343,5-45342	25261302
Liter	metals	5-45344	353 M452
			<u> </u>
•	<u> </u>		
	1		
<u> </u>	<u> </u>		
	<u> </u>		ļ
PHYSICAL DESCRI	IPTION AT TIME OF COL	LECTION:	
			
DUVETCAL CHANCE	C COON TIME OF COLLE	CCTION UNTIL SHIPMENT:	
PHISICAL CHANGE	23 PRUM TIME OF WILLE	COLON DALLE SHIPMENT.	
INSTRUMENT REAL	TNGS		
pH 6.4			
CONDUCTIVITY	~ 400 umlag		
TEMPERATURE	3°C.	•	

		systems/Black River	sunges its our
ASE NUMBER _	<i>5</i> 558		
AMPLE #/STAT10	N LOCATION Madrix	Spike Duplicate for from at edge of prope SAMPLING TIME 153	SW-1/Downstream
	sample	from at edge of prope	rty off riverban
AMPLING DATE _	2-5-86	SAMPLING TIME 153	0 '
ORGANIC TRA	FFIC NUMBER E	E994	
I NORGANIC T	RAFFIC NUMBER	$\frac{1E-N/A}{}$	
BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
80 02-jug	organics-P.P.	15-45330,5-45329	15312032
40 ml. vial	VOA	5-45333,5-45332	25261302
<i>:</i>	-		
		-	
			· · · · · · · · · · · · · · · · · · ·
			
		1 FATTON	
PHYSICAL DESCRI	PTION AT TIME OF COL	LECTION:	
			
DUVETCAL CHANCE	C FORM TIME OF COLLS	ECTION UNTIL SHIPMENT:	
PRISICAL CHARGE	3 TRUM TIME OF COLLEC	COLON ONLIE SHITTENIA	
INSTRUMENT REAL			
pH 6.5-			······································
4	230 FFM or 3401	inla	
	3°C.	•	· - · · · · · · · · · · · · · · · · · ·

CASE NUMBER	5558		
SAMPLE #/STATIO	N LOCATION SW-	1/ Downstream sand	e at edge of
	propert	ty off riverbank	
SAMPLING DATE_	2-5-86	SAMPLING TIME 153	30
	FFIC NUMBER		
I NORGANIC T	RAFFIC NUMBER	ME E 3/1	
DOTTI E	1 ANALYSTS	TAG NUMBERS	LOT NUMBER
ROTTLE	organics-P.P.	5-45324,5-45325	
80 oz. jug 40 ml. vial	VOA	5-45326,5-45327	·
Liter	metals	5-45328	35317452
LITEI	rnesais	1 2 72 3 40	1 23 21 13 2
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	l		
DUVETCAL DESCO	PTION AT TIME OF CO	I LECTION.	
PHISICAL DESCRI	IPITOR AT TIME OF CO	LECTION.	
PHYSICAL CHANGE	S FROM TIME OF COLL	ECTION UNTIL SHIPMENT:	·····
THISTORE GIANG	S INGI TITE OF COLE		
INSTRUMENT REAL	TINGS		
pH 6.5			
	230 PPM 07 340	jumkas	
	3°C.	<u> </u>	····

CASE NUMBER		y Systems/Black River	
		1	
SAMPLE #/STATIO	N LOCATION BL/	BLANK	
SAMPLING DATE_	z-5-86	SAMPLING TIME 1530)
ORGANIC TRA	AFFIC NUMBERE	G 537	
I NORGANIC	RAFFIC NUMBER	1EG 196 .	
	, •		
BOTTLE	i ANALYSIS	TAG NUMBERS	I LOT NUMBER
	organics-P.P.	15-45320, 5-45349	15317052
40 oz. jug 40 ml. vial	VOA	15-45321,5-45322	
Liter	metals	15-45323	35317452
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·	<u>L</u>		
	<u> </u>	<u> </u>	<u> </u>
PHYSICAL DESCR	IPTION AT TIME OF COL	LECTION:	
PHYSICAL CHANG	ES FROM TIME OF COLLI	ECTION UNTIL SHIPMENT:	
INSTRUMENT REA			
pH 7-5-		/ .	
CONDUCTIVITY	4ppm = 10/m	rkol	
TEMPERATURE	/Z°C.		· · · · · · · · · · · · · · · · · · ·

4



United States Attorney Northern District of Ohio

Suite 500 1404 East Ninth Street Cleveland, Ohio 44114

July 25, 1983

Paul J. Schaeffer U. S. Department of Justice Land and Natural Resources Division Hazardous Waste Section, Rm 1515, MAIN Washington, D. C. 20530

> Re: U. S. v. Chemical Recovery Systems, Inc., et al. Civil Action No. C80-1858 Judge Dowd

Dear Mr. Schaeffer:

In reference to the above-captioned case, enclosed please find a copy of an Order issued by Judge Dowd.

Sincerely yours,

J. WILLIAM PETRO, UNITED STATES ATTORNEY

Kathleen Ann Sutula Assistant U. S. Attorney

(FIS) 942-4394

KAS/fv

Enclosure

cc: Jonathan McPhee

Deborah Woitte

DOWD, J.

RECEIVED :

FILED

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133 JUL 22 AY 9 18

UNITED TETATES DISTRICT CRUMBERN DISTRICT OF CHED NORTHERN DISTRICT OF OHIO

EASTERN DIVISION

United States of America,

Plaintiff,

vs.

Chemical Recovery Systems, Inc., et al.,

Defendants, and Third Party Plaintiffs,

vs.

ORDER

CASE NO. C80-1858

Russell W. Obitts, et al.,

Third Party Defendants.

A status call was held on this matter on July 12, 1983. Counsel for the United States Government and counsel for the defendant Chemical Recovery Systems advised the Court that a proposed consent decree has been submitted by the government to counsel for Chemical Recovery Systems and its approval for presentation to the Court should be made within several weeks.

Accordingly, IT IS HEREBY ORDERED, ADJUDGED, and
DECREED that counsel for the plaintiff, the United States
Government and the defendant, Chemical Recovery Systems,
Inc., are directed to file the proposed consent decree with

the Court by August 12, 1983 or show cause why there has been a failure to do so. Counsel for the third party plaintiff, Chemical Recovery Systems, Inc., and counsel for the third party defendants, Russell W. Obitts and Dorothy Obitts, are directed to appear for an additional status call with respect to the third party action at 8:30 a.m. on October 6, 1983.

David D. Dowd, Jr. U. S. District Judge

UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF OHIO EASTERN DIVISION

UNITED STATES OF AMERICA,) NO. C80-1858	
Plaintiff,	\(\)	
٧.)	
CHEMICAL RECOVERY SYSTEMS, INC.,)	• •
Defendant.) CONSENT DECRE	1,

The above-captioned Complaint having been filed pursuant to 33 U.S.C. §1251 et seq. and 42 U.S.C. §6901 et seq. on October 7, 1980, and the parties, the UNITED STATES OF AMERICA, for the Administrator of the United States Environmental Protection Agency (hereinafter "U.S. EPA") and CHEMICAL RECOVERY SYSTEMS, INC., an Ohio corporation, (hereinafter "CRS") by their respective attorneys having consented to the entry of this Consent Decree:

NOW, THEREFORE, before taking any testimony, upon the pleadings, and without admission or adjudication of any issue of fact or law herein, and upon consent of the parties hereto, it is hereby ORDERED, ADJUDGED, AND DECREED as follows:

I. JURISDICTION

This Court has jurisdiction over the parties and subject matter of this action.

II. APPLICATION OF DECREE

This Decree shall apply to and be binding upon the United States and CRS (the Parties), and the successors and assigns of each, as well as any agencies, instrumentalities, officers, directors, agents and servants thereof acting in their respective official capacities. CRS shall provide a copy of this Decree to each contractor it retains to perform work contemplated in this Decree and shall condition any contract for such work on compliance with this Decree and applicable provisions of the approved plans as contemplated in this Decree. A copy of this Decree shall be lodged with the Recorder of Deeds for Lorain County, Ohio, to provide notice of the history of this Site to prospective purchasers of the CRS site located on 146 Locust Street, Elyria, Ohio (hereinafter "site").

III. OBJECTIVES

The objectives of the parties to this Decree are the abatement of any hazardous conditions at the CRS Site which may have existed both before and after CRS took title to the premises, and the abatement of discharges of contaminants, if any, into groundwater and the Black River from the CRS site.

IV. REPRESENTATIONS

CRS represents that it has, as of the entry of this Decree:

- A. Removed all tanks, drums and other spent solvent containers from the Site;
- B. Ceased the receipt, processing and storage of spent solvents on Site;

- C. Removed all temporary structures, the Brighton Still and the building which housed it as well as the Rodney Hunt Still, all storage tanks and all buildings except the upper warehouse;
- D. Secured the CRS Site by completing the existing fence so as to enclose the facility on all sides except the riverbank in order to prevent access by unauthorized persons;
- E. Filled in the sump under the Brighton Still building and sealed the sump under the Rodney Hunt Still building with concrete;
- F. Conducted soil testing and groundwater studies;
- G. Leveled dikes and rough graded selected areas.

V. REMEDIAL MEASURES

- A. On or before August 15, 1983, CRS shall:
 - Jointly conduct a visual inspection of the site with U.S
 EPA technical personnel, to identify spots of visibly
 contaminated soil if any. CRS shall give 10 working
 days notice of the date of this inspection to U.S. EPA.

 U.S. EPA may take samples of such soil for analysis.
 - Excavate all visibly contaminated soil identified by the above inspection;
 - 3. Excavate the perimeter of the Brighton Still building in the northwest corner of the Site, to a depth of one foot, and to a distance of two feet beyond the perimeter of the foundation;
 - 4. Dispose of all soil removed in these excavations in an U.S. EPA approved waste disposal site;

- 5. Backfill the excavated areas with clean clay-containing fill, as necessary, and grade to conform with existing terrain;
- 6. Gently grade the Site towards the river bank to a slope of approximately three percent (3%).
- B. At the next horticulturally appropriate time, CRS will seed the Site with appropriate grasses.
- C. CRS will conduct monitoring of the Black River adjacent to the Site a total of at least four times following entry of this Decree, for the following chemicals, PCBs and volatile organics listed in 40 C.F.F. §116.4, pursuant to §311(b) to (A) of the Clean Water Act, on the following basis:
 - Each monitoring shall consist of at least three samples, one of which is to be taken at the outfall from the sewer at CRS, and one downstream from the said outfall.
 The location of the third sample shall be determined by CRS. Both river samples shall be depth-integrated composites.
 - 2. All sampling and analysis shall be conducted according to U.S. EPA protocols, copies of which shall be provided upon request, and at a qualified laboratory, identified in advance to U.S. EPA.
 - 3. Sampling shall take place once each spring, during the first period of intensive melting of snow, or within 48
 hours of the first rainfall of one inch or more after March 1, whichever occurs first; and once each fall,

within 48 hours after the first rainfall of one inch or more following August 15; for two years next following entry of this Decree. At least 8 hours' notice of each said sampling shall be given to the Eastern District Office of U.S. EPA by telephone (216-835-5200).

4. All sample results shall be conveyed to U.S. EPA in writing within ten days of their receipt by CRS.

VI. RESPONSIBILITIES AND LIABILITIES

- A. CRS is ultimately responsible for designing and implementing all remedial measures. No advice, guidance, suggestions or comments by U.S. EPA on plans and reports submitted by CRS shall be construed to relieve CRS of this responsibility or transfer any of CRS' liability or obligation in this action to EPA.
- B. Upon completion of the activities required in paragraph V of this Decree, CRS shall submit a notice to the Director, Waste Management Division, Region V, U.S. EPA, certifying that such measures have been completed in full satisfaction of the requirements of this Decree.
- C. Whenever, under the terms of this Decree, a report or other document is required to be forwarded by one Party to another, it shall be directed to the individuals at the addresses specified below, unless those individuals or their successors give notice in writing to the other Party of another individual designated to receive such communications. Reports or documents shall be provided as to U.S. EPA:

Director, Waste Management Division United States Environmental Protection Agency Region V (5HR) 230 South Dearborn Street Chicago, Illinois 60604

As to CRS:

Chemical Recovery Systems, Inc. c/o David C. Long Suite 175 24500 Center Ridge Road Westlake, Ohio 44145

- D. Until termination of the provisions of this Consent Decree, ant thereafter in accordance with applicable law, the U.S. EPA, its contractors and consultants, shall have authority to enter the CRS site at all reasonable times with prior notice to CRS, for the purpose of (1) monitoring the progress of CRS in carrying out remedial measures, and (2) observing sampling procedures required under paragraph V of this Decree. U.S. EPA, its contractors, and consultants shall have the authority to require split samples in any such sampling procedure.
- E. All actions required to be taken by this Decree shall be undertaken in compliance with the requirements of applicable federal laws, including the Occupational Safety and Health Act, 29 U.S.C. 651 et seq., and regulations promulgated thereunder.
- F. All data, information, remedial plans, and other documents produced by CRS in the course of implementing this Consent Decree shall be available to the public, unless identified as confidential by CRS in conformance with 40 C.F.R. Part 2.

 The sampling and monitoring data and hydrological and geological

information shall not be considered confidential. Documents or information identified as confidential will be disclosed only in accordance with the confidentiality regulations of 40 C.F.R. Part 2.

G. No conveyance of title, easement, or other interest in the site shall be consummated by CRS or subsequent holders of any interest in the property without written notice to U.S. EPA and notice to the prospective conveyee as to the conditions of this Consent Decree. After completion of the requirements of this Consent Decree, the copy of the consent decree lodged with the Lorain County Recorder of Deeds shall constitute adequate notice to prospective conveyees for purposes of this Decree.

VII. EXCUSABLE DELAY

The requirements of this Decree shall be implemented within the time limits contained in this Decree unless such performance is impeded by reasons which constitute excusable delay or unavoidable accident.

"Excusable delay or unavoidable accident" is any delay in the completion, scheduling, or performance of a particular task, which arises from unforeseeable events beyond the control and without fault or negligence of CRS. CRS shall notify U.S. EPA within 24 hours of the occurrence or discovery of any such event, and submit a proposed revised schedule for compliance. U.S. EPA may then agree to excuse or permit delay of such compliance. If U.S. EPA does not so agree, CRS may petition the Court for an excuse or a delay.

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MODIFICATIONS

VIII.

The Court shall retain jurisdiction of this matter for the purposes of enabling the Parties to this Decree to apply to the Court for any further order that may be needed to construe, carry out, modify, or enforce compliance with the terms and objectives of this Decree until the termination of this Decree in accordance with the provisions of paragraph X.

IX. STIPULATED PENALTIES

Upon demand by U.S. EPA and upon the appropriate Motion and Order of this Court, CRS shall pay to the United States an amount not to exceed one thousand five hundred dollars (\$1,500) per day for each day that it fails to comply with the provisions of this Consent Decree. In exercising its discretion in seeking to have the Court impose a penalty hereunder, U.S. EPA shall take into account the magnitude of the violation, the duration of the violation, and any mitigating factors.

X. TERMINATION

The provisions of this Consent Decree shall terminate upon CRS' receipt of written notice from U.S. EPA that the remedial and monitoring provisions of this Decree have been successfully completed. Such notice shall issue within 60 days of the date that CRS performs the last act required of it by this Decree and so informs U.S. EPA unless the court orders otherwise.

XI. EXCEPTIONS AND RESERVATIONS

This Consent Decree shall in no way affect any third party actions existing as a part of this lawsuit, nor shall this Decree be construed so as to affect the rights or duties of the parties under the Comprehensive Environmental Response, Compensation and Liability Act. 42 U.S.C. §9601, et seq..

XII. ENTRY

The Parties hereby consent to	the entry of this Consent	Decree.
Dated and entered this	day_of	_, 1983.
	UNITED STATES DISTRICT JUI)GE

The Parties agree and consent hereto.

F. HENRY HABICHT, II
Acting Assistant Attorney General
Land and Natural Resources Division
United States Department of Justice
Washington, D.C. 20530

J. WILLIAM PETRO
United States Attorney
Northern District of Ohio
Cleveland, Ohio

PAUL J. SCHAEFFER
Department of Justice
Washington, D.C.

COURTNEY M. PRICE
Special Counsel for Enforcement
U.S. EPA

Washington, D.C.

VALDAS V. ADAMKUS

Regional Administrator

U.S. EPA Region V Chicago, Illinois

DAVID C. LONG

Attorney for Chemical

Recovery Systems

CHEMICAL RECOVERY SYSTEMS, INC.

By: Peter J. Shagena

Secretary